| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/240,509 | 01/29/1999 | HARI KALVA | AP31569 | 7416 |

21003    7590    07/07/2003

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| EXAMINER |
|---|
| PRIETO, BEATRIZ |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2142 | |

DATE MAILED: 07/07/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

| | Application No. | | Applicant(s) | |
|---|---|---|---|---|
| **Office Action Summary** | 09/240,509 | | KALVA ET AL. | |
| | Examiner | | Art Unit | |
| | B. Prieto | | 2142 | |

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _21 April 2003_ .

2a)☒ This action is **FINAL**.     2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-14_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-14_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

## *DETAILED ACTION*

1.      This communication is in response to request for reconsideration filed 04/17/03, claims 1-14 remain pending.

2.      Quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action.

3.      Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woods et. al. (Woods) Wired for Speed: Efficient Routes on VRML 2.0 in further view of Coven-Collaborative virtual environments (Coven), April 1997.

Regarding claims 8 and 1, Woods teaches features of invention substantially as claimed; Woods teaches a system/method supporting communicating command information between a VRL nodes for sending (source) and receiving (destination) data via routes (section 2.1-2.2), said nodes include a player VRML browser (client) (abstract), interactive communication between said nodes consisting of request-response model (section 2.3, i.e. client-server model) across a network (sections 2.2-2.3, client browser, configured to request data and receive arrival of requested data through a network) comprising:

          generating (firing) a command message associated with a user action or system event associated with streams containing scene description information (e.g. scene source nodes), command message including

          a command (eventIn, see sections 1.1-2.2, command routes, section 4.1 commands, i.e. execute fields), a command descriptor (event fields, see section 4.1), and one of a source node route (command routes-rendering scene means, section 2.2-2.3) and

          a command node (execute event sink field i.e. command route node, see sections 2.1 and 4.1);

          wherein event source/sink routes support interaction between a source of the route and a
destination of the route (see section 2.1, such as firing a "TimeSensor" node scene in the interaction VRML model, interactivity-model is request-response between a requesting source and a responding destination nodes, section 2.3); and

          transmitting the command message upon occurrence of a user or system-triggering event (e.g. Touchsensor node scene, see 2.1 section, user or system events, see 2.2, source/sink route, user or system triggering event, message (request) transmission, message (response) receipt, using event source/sink

routes, section 2.3, said messages to support said node scenes); however Woods does not explicitly teach a server route ("directly") associating a node with a command descriptor;

Coven discloses a server route ("directly") associating a node with a command descriptor and a command node ("indirectly) associating a node with the command descriptor, wherein

a command route (e.g. eventIn SFFloat set_fraction) is executed when an event command is received on the execute field associated with a object node scene, e.g. from a TouchSensor node (section 2.2.2 pages 6-7);

the execution of command route is associated with a command descriptor (e.g. exposedField MFFloat key, exposedField MFVec4f keyValue) (e.g. the orientation values are used by the object node scene to execute specified animated spinning effect) (Figs. 2-1 of section 2.2.2 and route commands of Fig. 2-2, pages 6-7);

a server route command supporting server interaction is executed when event command is received on the execute field (e.g. field SFBool directOutput FALSE) associated with a object node scene ("SFBool"), the command is communicated to the server as specified by the command descriptor to the server (e.g. exposedField MFString url) (see section 4.3.1 to 4.3.1.1, see Figs. 4-2 to 4-4 on pages 20-21)

exchanging the command message across a network upon the occurrence of a triggering event (section 4.4.2, trigger events on page 25, user process server interaction, section 4.3 on page 19-20, section 4.2.3.4 on page 19, communication over the network (Fig. 4-1, section 4.2.2 on page 14-16).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize Coven's disclosure server route ("directly") associating a node with a command descriptor, motivation would be for supporting multi-user interaction among remote client and between clients and multiple suppliers via the MUtech, as indicated by Coven.


Regarding claims 2-3, however Woods does not explicitly teach wherein said the generating command message, discussed above is consistent with local interactivity model defined in MPEG-4. Admittance of prior art (MPEP § 2129) Applicant disclosure states: "MPEP-4 essentially uses two modes of interactivity: local and remote. Local interactivity can be fully implemented using the native event architecture of MPEG-4 interactivity can be fully implemented using the native event architecture of MPEG-4 BIFS (Binary Format for Scenes), which is based on the VRML 2.0 ROUTEs design and documented in Part 1 of the MPEG-4 specification (Systems), see page 1, lines 26-33. It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize an interactivity model defined in MPEG-4, the new VRML 2.0 specification, enables much more dynamic and interactive environments supported by the convergence of these technologies; motivation would be to

provide via MPEG-4 a real service on desktop application enhancing the tele-presence and shared virtual reality space technology.

Regarding claims 4-5, the triggering event is a mouse clicks and wherein the triggering event is a timer signal (Woods, see 2.1 section).

Regarding claims 6-7, command information is transmitted from the server to the client and wherein command information is transmitted from the client to the server (Woods, message between a provider node and a player VRML browser client node, request/response, see 2.1-2.3, request e.g. change state of current scene, response update and rendering requested scene)

Regarding claims 9-14, the claim comprise the system in accordance to the method disclosed on claims 1-7 respectively, same rationale is applicable.

## *Citation of Pertinent Art:*

4.      The prior art made of record and not relied upon is considered pertinent to applicant's disclosure; Copies of documents cited will be provided as set forth in MPEP§ 707.05(a):

The Virtual Reality Modeling Language Annex D, ISO/IEC 14772-1: 1997, printed for the following site http://www.vrml.org/Specification/VRML97/part1/examples.html on 06/21/03.

Discloses a scripting command, a command descriptor event field, a server route command associating with a script node scene with the command descriptor and said command descriptor associating said script node with said command descriptor, including

a scripting command (DEF OpenVault Script), a command descriptor event field(s), a server route (e.g. Route TS.isOver TO OpenVault.combinationEntered, Route TS.touchTime TO OpenVauly.openVault, Route OpenVault.vaultUnlocked TO Click.startTime, including URL "click.wav.") command associating with a script node scene (OpenVault) with the command descriptor (event fields) and said command descriptor associating said script node with said command descriptor (see section D.5).

Populating the Internet: Supporting Multiple Users and Shared Applications with the VRML, Broll, W., ACM 0-89791-886, VRML Feb. 1997, pages 33-40.

Broll teaches interactive communication (i.e. to and from) between server and client and among multiple client, teaching communication from the client to the server (see Figs. 2-3, sections 1 to 2.1.2).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Prosecution of this application is closed by means of this final office action § 1.113, applicant may request continued examination of the application by filing a Request for Continued Examination of under 37 CFR § 1.114 and providing the corresponding fee set forth in § 1.17(e) for the submission of, but not limited to, new arguments, an information disclosure statement, an amendment to the written description, claims, drawings, or new evidence in support of patentability. Or applicant whose claims have been twice rejected, may appeal from the decision of the administrative patent judge to the Board of Patent Appeals and Interferences under 35 U.S.C. §134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Mark R. Powell can be reached on (703) 305-9703. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.
Any response to this final action should be mailed to:
    **Box AF**
        Commissioner of Patents and Trademarks
        Washington, D.C. 20231

    **or Faxed to:**
        (703) 746-7238 for TC 2100 Official After-final communications; please mark
        "EXPEDITED PROCEDURE", and
        (703) 746-7239 for other TC 2100 Official communications.
    **or:**
        (703) 465-7240 for Non-Official, Draft communications, status query, please
    label "PROPOSED" or "DRAFT".

    Or Telephone:
        (703) 306-5631 for TC 2100 Customer Service Office

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA, Sixth Floor (Receptionist).

B. Prieto
TC 2100
Patent Examiner

MARK POWELL
SUPERVISORY PATENT EXAMINER
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